

Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26 D-32758 Detmold Germany

www.weidmueller.com

# **Product image**

















Similar to illustration

Dimensionally stable, straight, codable male connector from the Unimate range of plugs with integral aid to prevent wrong connections. Available with open or closed sides. Fixing blocks can be attached to the closed version. The solder pin length of 3.2 mm has been optimised for wave soldering. Supplied in cardboard box.

#### **General ordering data**

Version	PCB plug-in connector, male header, Dovetails for fixing blocks, THT solder connection, 5.08 mm, Number of poles: 5, 180°, Solder pin length (I): 3.2 mm, tinned, orange, Box
Order No.	<u>1242860000</u>
Туре	SLA 05/180B 3.2SN OR BX
GTIN (EAN)	4008190087876
Qty.	50 pc(s).
Product data	IEC: 400 V / 17.5 A UL: 300 V / 10 A
Packaging	Box

Creation date March 23, 2021 12:05:48 PM CET



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# **Technical data**

#### **Dimensions and weights**

Depth	9.4 mm	Depth (inches)	0.37 inch
Height	15.2 mm	Height (inches)	0.598 inch
Height of lowest version	12 mm	Net weight	2.58 g
Width	27.4 mm	Width (inches)	1.079 inch

#### **System specifications**

Product family	OMNIMATE Signal - series BLA/SLA 5.08	Type of connection	Board connection
Mounting onto the PCB	THT solder connection	Pitch in mm (P)	5.08 mm
Pitch in inches (P)	0.2 inch	Outgoing elbow	180°
Number of poles	5	Number of solder pins per pole	1
Solder pin length (I)	3.2 mm	Solder pin dimensions	d = 1.2 mm, Octagonal
Solder eyelet hole diameter (D)	1.3 mm	Solder eyelet hole diameter tolerance	(D)+ 0,1 mm
L1 in mm	20.32 mm	L1 in inches	0.8 inch
Number of rows	1	Pin series quantity	1
Touch-safe protection acc. to DIN VDE	Safe from back-of-hand	Volume resistance	
57 106	touch		$5.50~\text{m}\Omega$
Can be coded	Yes	Pulling force/pole, max.	2 N

#### **Material data**

la culatia a sa stavial	PBT GF	Colour	
Insulating material	PBI GF	Colour	orange
Colour chart (similar)	RAL 2000	Insulating material group	Illa
Comparative Tracking Index (CTI)	≥ 200	UL 94 flammability rating	V-0
Contact material	CuSn	Contact surface	tinned
Storage temperature, min.	-40 °C	Storage temperature, max.	70 °C
Operating temperature, min.	-50 °C	Operating temperature, max.	120 °C
Temperature range, installation, min.	-25 ℃	Temperature range, installation, max.	120 °C

#### Rated data acc. to IEC

tested acc. to standard	IEC 60664-1, IEC 61984	Rated current, min. number of poles (Tu=20°C)	17.5 A
Rated current, max. number of poles (Tu=20°C)	12.5 A	Rated current, min. number of poles (Tu=40°C)	16 A
Rated current, max. number of poles (Tu=40°C)	11 A	Rated voltage for surge voltage class / pollution degree II/2	400 V
Rated voltage for surge voltage class / pollution degree III/2	320 V	Rated voltage for surge voltage class / pollution degree III/3	250 V
Rated impulse voltage for surge voltage class/ pollution degree II/2	4 kV	Rated impulse voltage for surge voltage class/ pollution degree III/2	4 kV
Rated impulse voltage for surge voltage class/ contamination degree III/3	4 kV	Short-time withstand current resistance	3 x 1s with 100 A

#### Rated data acc. to CSA

Institute (CSA)	(SP·	Certificate No. (CSA)	
			12400-158
Rated voltage (Use group B / CSA)	300 V	Rated voltage (Use group D / CSA)	300 V
Rated current (Use group B / CSA)	10 A	Rated current (Use group D / CSA)	10 A
Reference to approval values	Specifications are maximum values, details - see approval certificate.		



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# **Technical data**

#### Rated data acc. to UL 1059

Institute (UR)		Certificate No. (UR)	
			E60693
Rated voltage (Use group B / UL 1059)	300 V	Rated voltage (Use group D / UL 1059)	300 V
Rated current (Use group B / UL 1059)	10 A	Rated current (Use group D / UL 1059)	10 A
Reference to approval values	Specifications are maximum values, details - see approval certificate.		

#### **Packing**

Packaging	Box	VPE length	40 mm
VPE width	92 mm	VPE height	126 mm

#### Classifications

ETIM 6.0	EC002637	ETIM 7.0	EC002637
ECLASS 9.0	27-44-04-02	ECLASS 9.1	27-44-04-02
ECLASS 10.0	27-44-04-02	ECLASS 11.0	27-46-02-01

important note	
IPC conformity	Conformity: The products are developed, manufactured and delivered according international recognized
	standards and norms and comply with the assured properties in the data sheet resp. fulfill decorative properties

Notes

- · Additional colours on request
- · Gold-plated contact surfaces on request
- · Rated current related to rated cross-section & min. No. of poles.
- P on drawing = pitch
- · Rated data refer only to the component itself. Clearance and creepage distances to other components are to be designed in accordance with the relevant application standards.

in accordance with IPC-A-610 "Class 2". Further claims on the products can be evaluated on request.

· Long term storage of the product with average temperature of 50 °C and average humidity 70%, 36 months

#### **Approvals**

Approvals



ROHS	Conform
UL File Number Search	E60693

#### **Downloads**

Approval/Certificate/Document of	
Conformity	Declaration of the Manufacturer

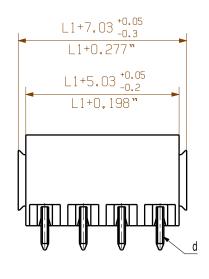


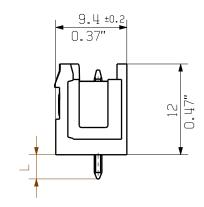
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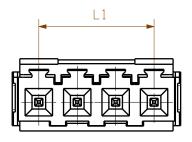
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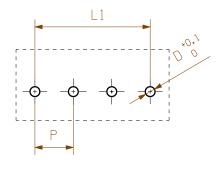
Drawings	www.weidmueller.com
	Dimensional drawing











HOLE PATTERN

For the mounting of PCBs, it should be noted that the rated data relates only to the PCB components alone.

The neccessary creepage and clearance paths must be observed in connection with the respective applicant in accordance to IEC 664 / VDE 0110.

The current-carrying capacity and pitch tolerance is to be determined according to DIN IEC 326 part 3 very fine.

Weidmüller PCB components are tested to the DIN EN 61984 standard, and are valid for its field of application. Provided that the components are used to the intended purpose, all requirements with respect to the occuring of electrical, mechanical, thermic and corrosive stress will be satisfied.

 $P = 5.08 \, \text{mm} / 0.2 \, \text{inch}$ 

d = max.1.2mm/0.047inch $D = 1.3 \, \text{mm} / 0.51 \, \text{inch}$ 

0,1 3,2 -0,30,1 4,5 -0.3PINLÄNGE L **TOLERANZ** PIN LENGTH L TOLERANCE

Cat.no.:.						
É	n	L1 [mm]	L1 [Inch]			
E	2	5,08	0,200			
$\dashv$	3	10,16	0,400			
$\dashv$	4	15,24	0,600			
	5	20,32	0,800			
	6	25,40	1,000			
	7	30,48	1,200			
	8	35,56	1,400			
	9	40,64	1,600			
	10	45,72	1,800			
	11	50,80	2,000			
	12	55,88	2,200			
	13	60,96	2,400			
	14	66,04	2,600			
	15	71,12	2,800			
	16	76,20	3,000			
	17	81,28	3,200			
	18	86,36	3,400			
	19	91,44	3,600			
	20	96,52	3,800			
	21	101,60	4,000			
	22	106,68	4,200			
		111,70	1,100			

116.84

4.600 4,400

SHOWN:S	LA 04/180B
	tolerance: 2768-mK

ROMS	19.02.18 HE	RTEL_S 0	' W	eidmüller 🏂	
	Modification				
		Date	Name		
	Drawn	17.09.2009	HELIS_MA	SLA	
	Responsible		HERTEL_S	STIFT	
Scale: 2:1	Checked	27.02.2018	HELIS_MA	PIN H	
Supersedes: .	Approved		LANG_T	Product file: SLA	

101264/4 19.02.18 HERTEL\_S

SLA ../180...

Drawing no.

02

Sheet

PIN HEADER

7123

27739

13

Issue no

sheets



## Recommended wave solderding profiles

#### Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 16 D-32758 Detmold Germany

Fon: +49 5231 14-0 Fax: +49 5231 14-292083 www.weidmueller.com

#### Single Wave:



#### **Double Wave:**



#### Wave soldering profiles

Wired connection elements should be processed in accordance with the DIN EN 61760-1 standard. We have included two recommendations for practical wave soldering profiles, with which Weidmüller PCB terminals and connectors are qualified.

When choosing a suitable profile for your application, the following factors also need to be considered:

- PCB thickness
- Proportion of Cu in the layers
- Single/double-sided assembly
- Product range
- Heating and cooling rates

The single and double wave profiles each indicate the recommended operating range, including the maximum soldering temperature of 260°C. In practice, the maximum soldering temperature is quite often well below the above maximum profile.